Site and Project Planning

Los Alamos National Laboratory
Laboratory Implementation Requirements LIR 210-01-01.1
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1.0 INTRODUCTION

Much of Los Alamos National Laboratory work comprises site development and project-type activities. Quality and formality of site and project development, approval, execution, and closeout are ensured at the Laboratory by implementing the requirements contained in Laboratory Implementation Requirements (LIRs) and underlying procedures. Thus the following site and project planning goals have been established:

- Institutionalize and integrate project management practices and processes across organizations.
- Value the long-term benefit of project management improvements and integrated actions.

The success of individual activities and/or projects requires engaging and obtaining planning support from a composite of Laboratory divisions, many of their associated group-level organizations, and in some cases external regulators. The comprehensive planning requirements contained in this LIR have been developed to assist project and program personnel when identifying potential causes of and risks associated with project failure that may arise within such disciplines as facility management, environmental compliance/stewardship, health and safety, security, financial budgets and control, and procurement. The requirements contained in this LIR complement the following Laboratory requirement documents:

LPR 210-01-00 Comprehensive Site Planning
LPR 220-01-00 Managing Facility Projects
LPR 230-01-00 Managing Facility Assets
LPR 230-03-00 Maintenance Work Control
LPR 230-04-00 Conduct of Maintenance
LPR 240-01-00 Facility and Operating Limits and Configuration
LPR 280-02-00 Roles and Responsibilities for Managing Facilities
LPR 300-00-00 Integrated Safety Management
LPR 402-00-00 Worker Health and Safety
LPR 403-00-00 Emergency Management
LPR 404-00-00 Environmental Protection
LPR 406-00-00 Integrated Safeguards and Security Management
LIR 220-01-01 Construction Project Management
LIR 230-01-03 Integrated Space Management Program
LIR 230-04-01 Laboratory Maintenance Management Program
LIR 280-02-01 Laboratory Facility Management Program
LIR 300-00-05 Facility Hazard Categorization
LIR 300-00-06 Nuclear Facility Safety Authorization
LIR 300-00-07 Non-nuclear Facility Safety Authorization
LIR 300-00-08 Startup/Restart of Laboratory Facilities/Activities
LIR 402-10-01 Hazard Analysis and Control for Facility Work
LIR 402-10-03 ES&H Management of Contractor Performed Facility Construction/Maintenance, Environmental Restoration, D&D and Related Drilling Operations

LIR 402-880-01 Excavation and Soil Disturbance Permit Process

LIR 403-00-01 LANL Emergency Management
LIR 404-30-02 NEPA, Cultural Resources, and Biological Resources Process
LIR 406-00-01 General Security
LIR 406-00-02 Classified Security
LIR 403-00-03 Nuclear Safeguards

The requirements contained in this LIR shall be effective as of the date this document is issued.

2.0 IN THIS DOCUMENT

3.0 PURPOSE

The purpose of the requirements contained in this LIR shall be to integrate and define requirements and processes that, when implemented, enable and ensure that Laboratory Programs, Projects, and Operations are effectively planned to achieve successful, productive, and efficient land and facility-use and programmatic operations.

4.0 SCOPE/APPLICABILITY

The requirements contained in this LIR shall apply to all workers, including contract personnel, who are responsible for programs, projects, or operations that involve:

- Institutional site development
- Future facility use or needs

- New or modified programmatic operations that impact facility systems, structures, or components, the environment, and/or have potential for illness/injury to workers or the public.

- New construction
- Modification, improvement, upgrade to existing facilities, infrastructure or land
- Corrective maintenance
- Decommissioning, Decontamination, Demolition, and/or Disposal
- Environmental Remediation

The requirements contained in this LIR shall not apply to planned preventative-maintenance or emergency maintenance as defined by LIR 230-03-01 (Facility Management Work Control) and LIR 230-04-01 (Laboratory Maintenance Management Program).

5.0 DEFINITIONS

- *Area Development Plans* - Plans that address a geographic section of the Laboratory and define the current and proposed built environment and planning elements (see Section 7.2.1).

  Guidance Note: These plans provide increased detail consistent with the Laboratory's comprehensive site planning processes and include issues related to current and proposed occupants and land uses.

- *Comprehensive Site Plan* – An institutional-level plan that addresses the entire Laboratory physical site and defines and proposes the built environment.

  Guidance Note: Elements (see Section 7.2.1) of the plan include, but are not limited to: land use, facilities, transportation, utilities, safeguards and security, safety, space, and environment. It also includes elements such as urban design, sustainable design, pedestrian and open space networks, parking, and other elements as determined by Laboratory management.

- *Corrective Maintenance* – Repair of failed or malfunctioning equipment, system, or facilities impacting mission accomplishment, safety of workers or the public, or the environment. Such maintenance is to restore to the intended function or design.

  Guidance Note: This maintenance does not result in a significant extension of the expected useful life and does not include planned preventative maintenance nor incidental fixes (e.g., repair broken door, replace broken window).

- *Disposition* – The act of decommissioning, decontamination, demolition, and disposal of existing structures, systems, and utilities returning land to original form for future improvements.

- *Disposition Plan* – A plan that evaluates the condition of site, structure(s), and component(s) at the end of the facility life cycle.

  Guidance Note: Documentation includes the facility description, threats to workers or health or the environment, and the basis for proceeding with decommissioning either under a regulatory scenario or as a programmatic decision. In respect to decommissioning, the plan addresses decontamination if required, inactivation and removal of security systems,

demolition of structure(s), disposal of materials, and removal of utilities returning the site to original status for future use.

- *ES&H 5-YR Management Plan* – A plan that identifies major ES&H costs across the Laboratory by functional category (e.g., RP, IH, IS, Crit Safety...), provides the basis for mutual agreement between Lab and NNSA regarding key ES&H issues/areas, and provides the annual mandatory Compliance Liability Statement.
- *Facility Maintenance* – A program utilizing such concepts as organization, plans, procedures, schedules, cost control, periodic evaluation, performance indicators and feed back for the effective control of maintenance with adequate provisions for interface with disciplines such as health, safety, environmental compliance, quality control, and security.

  Guidance Note: All work done in conjunction with existing DOE facilities and property is maintenance (preserving), repair (resorting), service (cleaning and making usable), or improvements (modifications).
- *Facilities Maintenance Plan* – A plan that includes management approach, planning, budgeting, tasks and responsibilities for regular (scheduled or unscheduled) repair and upkeep of site furnishings, buildings and other indoor facilities such as repairing broken or worn site furnishings, building components and equipment, preventative maintenance work, and other tasks that assist in achieving the design life expectancy of building components and equipment.
- *Facility Strategic Plan* – A line-organization-level plan developed in accordance with institutional goals that identifies facility requirements for up to 10 years by focusing on cost effective approaches to satisfy current and future mission objectives, improve overall facility performance and reduce backlog of maintenance. The plan supports information for the Ten-year Comprehensive Site Plan and project proposals for Divisions.
- *Infrastructure Plans* - Master and Site Development-level plans that assess infrastructure requirements with a long-term outlook to include but not limited to
  - Utilities Plan that determines capacities, tie in points, and routing of required utilities to support the mission(s).
  - Transportation Plan that clearly states assumptions, existing and projected traffic volumes, turning movements, facility geometry, and traffic control.
  - Urban Design Plans that address positive, safe, efficient, and desirable interfaces for personnel to the built and natural environment such as pedestrian and bicycle pathways, open space, and landscaping.
- *Institutional Site and Planning Authority* – The Site and Project Planning (PM-1) Group serves in this capacity and is to provide integration among the various SME organizations with planning responsibilities.
- *Life-Cycle Management* – The process of physical asset acquisition, operation, maintenance, decommissioning, decontamination, demolition, and disposal.

- *Long-term environmental stewardship (LTES)* – Activities (such as operation and maintenance of engineered barriers, environmental monitoring, administrative controls such as land-use restrictions, and information management) applied at post-remediation sites to manage residual contamination to ensure continued protection of human health and the environment.
- *Master Plans* - Plans that address specific technical areas (or parts thereof) and define the current and proposed built environment and planning elements (see section 7.2.1).

  Guidance Note: These plans provide increased detail consistent with the Laboratory's comprehensive site planning processes and conceptual requirements of the current and/or proposed occupants and land uses.
- *PR-ID* (formerly ESH-ID) – The Permit and Requirement Identification System, an automated system to identify and communicate regulatory and internal permits or requirements (Hold Points) and best management practices (Check Points.)
- *PR-ID Issuing Divisions* – Service divisions responsible for oversight of Laboratory activities, issuing permits for specific activities, and/or reviewing/approving activities to ensure regulatory, best business practice, and procedural compliance. Such divisions include but are not limited to HSR, RRES, FWO, CCN, CIO, CFO, SUP, S and ADO-IFC.
- *Primary OIC* – The Site and Project Planning (PM-1) Group serves as the primary office of institutional coordination (OIC) for this LIR and is responsible to ensure contributing discipline specific OICs are engaged regarding changes or exceptions to this LIR.
- *Site Development Plans* – Plans that depict specific site selection of new or relocated structures and the surrounding technical areas (or parts thereof) in support of site selection decisions.
- *Site Safeguards and Security Plan* – An institutional-level plan that summarizes Laboratory safeguards and security programs, including vulnerability, risk, and threat assessments for specific Laboratory facilities and activities.

  Guidance Note: The Plan guides long-term safeguards and security operations, identifies key site-protection elements in place, and summarizes site protection in terms of meeting mission and threat parameters.
- *Sustainable Design* – Application of building design principles to site, design, deconstruct, construct, renovate, operate, and maintain buildings that maximize energy, water and materials efficiency; while providing healthy, productive, and comfortable indoor environments that increase worker productivity.
- *Ten-year Comprehensive Site Plan* – An institutional-level plan that provides strategic direction for the physical complex and includes direct and indirect NNSA funded facilities and infrastructure activities (such as new construction, maintenance, upgrade, and modernization) in support of NNSA's initiative to restore, revitalize, and rebuild the National Nuclear Security complex.
- *Upgrade* – Modification, renovation, or modernization of facilities to achieve improved operations or meet new standards.

6.0 PRECAUTIONS AND LIMITATIONS

The scope of the requirements contained in this LIR shall not include planning activities for Program sponsorship and/or funding, such as the Program Planning Budgeting and Evaluation System (PPBES) and Program Budget Books.

Guidance Note: Review of other LIRs for additional planning requirements specific to types of activities not covered by this LIR is highly recommended.

Successful operations and facility use shall also require implementation of the planning requirements contained in LIRs such as Chemical Management (LIR 402-510-01), Safe Work Practices (LIR 300-00-01), Integrated Space Management (LIR 230.01.03), and Records Management (LIR308-00-02).

These technically specific type LIRs address operational requirements that must be implemented rather than the interface between operations and facility use.

Guidance Note: Where direct linkages to Site and Project Planning exist, references to appropriate LIRs are included herein.

Implementation of the requirements contained in this LIR must be predicated on and measured by the Laboratory's success in implementing plans that result from this LIR's requirements and consistent use of required processes described herein.

7.0 IMPLEMENTATION REQUIREMENTS

7.1 Roles and Responsibilities

The following organizations and/or positions shall be responsible and accountable for accomplishing the expectations listed below and ensuring the requirements contained in this LIR (Section 7.2) are implemented.

Who/Organization	Must
Workers	• Perform work that has been correctly planned, permitted, and approved. • Perform work safely and securely and in accordance with Integrated Work Management requirements including approved IWDs • If unsafe or insecure work is observed, stop work and immediately report the situation to your line management.
Operations, Safety, Security, and Environment Responsible Line Managers	• Lead in developing, maintaining, and updating Division Facility Strategic Plans in collaboration with Institutional site and planning support organizations. • In collaboration with Institutional site and planning support organizations, provide input and participate in site and project planning processes that impact existing and planned facilities, programs, projects, or activities for which they are responsible. • Ensure that the use of the PR-ID process and resulting Hold and/or Check Points are addressed and managed for work/activities subject to the requirements contained in this LIR (Section 4.0). • Ensure projects and project type activities do not exceed the operating envelopes, capabilities, and parameters as defined by Safety and Security Plans and Authorization Bases.
Infrastructure, Facilities, and Construction Office (ADO-IFC)	• Establish procedures and expectations for development of the Ten-Year Comprehensive Site Plan. • Facilitate the Integrated Nuclear Plan. • Serve as an OIC for this LIR representing the IFC issues and requirements.
Site Planning and Construction Committee (SPCC)	• Approve site selection for general plant, line item, or projects as presented by the owning division and PM-1. • Oversee Laboratory activities for construction, major maintenance (GPP-level), space allocation, and long-range planning. • Review, upon request, construction, maintenance, or other physical site plans as defined in this LIR (such as area development and master plans). • Provide institutional approval for planning documents (e.g., Ten-year Comprehensive Site Plan) to be submitted to NNSA or other outside agencies.
Facility and Project Managers/Team Leaders	• Ensure the PR-ID is initiated and resulting Hold and/or Check Points for each PR-ID are addressed and managed for work/activities subject to the requirements contained in this LIR (Section 4.0).

Who/Organization	Must
	• Ensure PR-ID Reviewing and Permitting Organizations and SMEs are engaged as identified by the PR-ID. • Participate in planning processes for facilities, programs, projects, or activities for which they are responsible.
Site and Project Planning (PM-1)	• Serve as the Institutional site and physical planning authority and as the primary OIC for this LIR. • Lead or participate in planning for new construction projects. • Establish procedures and expectations of the Comprehensive Site Planning process, specifically for development of the Comprehensive Site Plan, Area Development Plans, the Ten-year Comprehensive Site Plan, and Infrastructure Plans. • Collaborate with organizations responsible for specific plans and/or involved in planning support activities associated with the Comprehensive Site Planning processes (e.g., Facility Strategic Plans). • Maintain access to institutional and organizational plans. • Administer the Site Selection Process. • Determine if a site request is unique and requires SPCC approval.
Facility Planning and Space Management (FWO-FP)	• Provide and maintain the Institutional Space Database and Space Request System used to initiate requests for Site Selection and Excess/Disposition of facilities. • Establish and maintain space standards for assessing utilization and allocating space. • Provide space data and building information (e.g., condition, age, utilization). • Provide analysis and input relative to space and space needs for various planning efforts. • Use and incorporate long-range planning objectives in tactical plans and actions. • Collaborate with Institutional site and physical planning authority and other planning support organizations. • Serve as an OIC for this LIR representing discipline specific issues and requirements.
Security Plans and Programs (S-1)	• Establish procedures and expectations for the Site Safeguards and Security Plan. • Collaborate with Institutional site and physical planning authority and other planning support organizations • Serve as an OIC for this LIR representing the discipline specific issues and requirements.
Utilities and Infrastructure (FWO-	• Determines availability of infrastructure support for the various planning documents and projects.

Who/Organization	Must
UI)	• Collaborate with the Institutional site and physical planning authority particularly and other planning support organizations in preparation of infrastructure plans. • Serve as an OIC for this LIR representing discipline specific issues and requirements.
Maintenance and Systems Engineering (FWO-MSE)	• Establish procedures and expectations for development of Facility Maintenance Plans. • Collaborate with the Institutional site and physical planning authority and other planning support organizations. • Serve as an OIC for this LIR representing discipline specific issues and requirements.
Solid Waste Operations (FWO-SWO)	• Establish procedures and expectations for development of the Facilities Disposition Plan. • Collaborate with the Institutional site and physical planning authority and other planning support organizations. • Serve as an OIC for this LIR representing discipline specific issues and requirements.
Ecology (RRES-ECO)	• Establish procedures and implement an Environmental Management System. • Collaborate with the Institutional site and physical planning authority and other planning support organizations. • Serve as an OIC for this LIR representing discipline specific issues and requirements. • Perform environmental planning to support comprehensive site planning processes and support environmental compliance.
Remediation Services (RRES-RS)	• Establish procedures and expectations for development of the Long-term Stewardship Plan. • Collaborate with the Institutional site and physical planning authority and other planning support organizations.
Pollution Prevention (RRES-PP)	• Provide project-planning support for sustainable design. • Establish procedures and expectations to eliminate or minimize potential waste streams associated with planned facilities, programs, projects, or activities.
Health, Safety, and Radiation Protection Division (HSR-DO)	• Establish procedures and expectations for development of the ES&H Five-Year Management Plan. • Collaborate with the Institutional site and physical planning authority and other planning support organizations. • Serve as an OIC for this LIR representing discipline specific issues and requirements.
Performance Surety Office of Authorization	• Serve as an OIC for this LIR representing discipline specific issues and requirements.

Who/Organization	Must
Basis (PS-OAB)	
PR-ID Reviewing/Permitting Divisions	• Appoint Subject Matter Expert (SME) Reviewers and Division Points-of-Contact for PR-ID. • Ensure timely SME response and support for PR-ID projects. • Issue permits or provide documented approval of activity Hold Points through the PR-ID process. • Provide efficient and cost effective processes for issuance of permits and approvals and ensure continuous improvement in such processes. • Provide the PR-ID Owner timely updates of new or revised requirements and the names of current SME Reviewers and Division Points-of-Contact.
PR-ID Subject Matter Expert (SME) Reviewers	• Ensure timely response and support for PR-ID projects by providing project reviews, guidance, and approvals as required
PR-ID Division Point-of-Contact	• Coordinate Division PR-ID roles and responsibilities.
PR-ID Owner	• Administer the PR-ID process. • Coordinate requirement updates with PR-ID Reviewing/Permitting Divisions. • Ensure timely system updates that provide current information and support to activities.

7.2 Specific Implementation Requirements

The comprehensive site planning requirements contained in this LIR must be implemented to ensure new and existing Laboratory assets, lands, and facilities are identified, planned, initiated, supported, and implemented to protect the safety of the public, laboratory workers, the environment, and support the mission of the Laboratory. The following requirements shall be implemented to ensure comprehensive planning is effectively and efficiently completed.

7.2.1 Planning Elements

Planning efforts and site development shall ensure integration of the following planning elements. The graded approach (see LIR 230-01-02) shall be applied when determining the level of detail required by the specific scope of work.

The PR-ID system (see Section 7.2.3.2) shall be used to initiate integration of the planning elements.

Planning efforts and physical development shall include the following elements.

Guidance Note: Institutional and/or organizational plans that further define or support these elements are noted in Section 7.2.5 of this LIR.

7.2.1.1 Land Use

Ensure proposed land uses support the Laboratory mission and are compatible with adjacent uses by or through

- Determining and minimizing impacts to operational activities from noise, traffic, light, vibrations, and emissions.
- Minimizing threats and risks to property, assets, and personnel in accordance with LANL Security Protection Strategies.
- Consistency with the Laboratory's Comprehensive Site Planning process (Section 7.2.3.1).
- Congruence with facility architectural scale, mass, and style as defined by applicable area development plans and master plans, design principles, and sustainable design guidelines (http://www.lanl.gov/f6stds/pubf6stds/engrman/4arch/pdfs/Sustainable.pdf).

7.2.1.2 Transportation Capability

Ensure, to the extent practicable, that transportation impacts and/or requirements are addressed with a goal of improving the Laboratory's transportation system by or through

- Evaluating capacity and/or condition of affected roadways
- Providing intersection design with safe access
- Parking capacity and/or condition and ensuring required capability for any new development
- Supporting alternative transportation modes
- Providing pedestrian and/or bicycle pathways with safe access and transport.
- Identifying and providing for potential movement of hazardous materials, particularly special nuclear materials and explosives
- Providing the ability to respond to accidents including emergency response and evacuation of facilities and operations served by the transportation routes

7.2.1.3 Safeguards and Security

Ensure secure operations and protection of national security interests by

- Providing for required materials control and accountability
- Including required physical and information security
- Providing required security systems
- Providing support, when required, of the Laboratory's protective force
- Including access controls and personnel security requirements.
- Addressing foreign ownership, control, or interests concerns

7.2.1.4 Infrastructure

Ensure existing or new utilities are available to meet requirements of planned site development by or through

- Evaluating and integrating needs for and impacts to infrastructure elements which include the following
    - Water

- Storm Water
- Sewer
- Waste
- Natural gas
- Electricity
- Communications
- Computer networking

- Responsible use of capacity for each of the Laboratory's infrastructure elements including that available capacity is not exceeded
- Providing, when required, new or revitalized utilities capability

7.2.1.5 Environmental Compliance and Stewardship

Promote sustainability by

- Minimizing environmental impacts
- Minimizing the disturbance of undeveloped land
- Minimizing the use of power, water, consumable goods, and other natural resources (consolidation of facilities)
- Preventing or minimizing pollution
- Collaborating with neighboring landowners and land management agencies to address regional and cultural resource issues
- Complying with and, where possible, exceeding all environmental laws and regulations that apply to the proposed site and its future use
- Ensuring early identification and response to potential environmental impacts including, when required, pre-operational characterization, assessment, remediation, and effluent/surveillance monitoring
- Fully considering the complete life cycle of the project including the ability to D&D the facility after the mission is complete and the potential environmental impacts of D&D on future land use

7.2.1.6 Facilities

Establish and use facilities based on mission requirements, organization functional requirements (e.g., staffing, equipment, processes), and condition of existing facilities by

- Evaluating current condition and costs for renovation versus deferred maintenance requirements; to include
  - Required utilities
  - Vehicular circulation
  - Pedestrian Circulation
  - Condition of roof
  - Required floor and roof loading capacity
  - Code compliance for occupancy changes
  - Condition of original site improvements
  - ADA compliance
  - Energy efficiency
- Improving the work environment

- Reducing facility operating and maintenance costs
- Implementing sustainable design principles and practices for new and renovated buildings and facilities.

7.2.1.7 Public and worker health and safety

Ensure construction and operations provide for public and worker safety by

- Providing required radiation protection systems and devices
- Providing capability to handle chemicals and./or explosives safely
- Mitigating identified hazards and safety concerns to the maximum extent practicable
- Providing for emergency response requirements
- Performing all activities in conformance with the 5 steps, core functions, and 8 guiding principles of Integrated Safety Management (LAUR 98-2837)

7.2.1.8 Space

Maintain required and correct utilization of space by

- Planning utilization and occupancy based on appropriate guidelines.
- Integrating occupancy plans with facility life cycles.
- Ensuring all activities conform to the Integrated Space Management Program (LIR 230-01-01).

7.2.1.9 Urban Design

Create and maintain applicable urban design by or through

- Structures (new or modified) that are consistent with architectural, landscape architectural, and urban planning standards and design principles
- Providing for pedestrian and open space networks including, courtyards, plazas, visual corridors, and focal spaces.

7.2.2 Site-Wide Environmental Impact Statement (SWEIS)

Laboratory projects and project type activities shall be consistent with the Record of Decision (ROD) for the Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory (DOE/EIS -0238) that was issued in September 1999. The ROD and mitigation action plan requires an Integrated Resource Management Plan that shall be implemented by the Laboratory through an environmental management system.

7.2.3 Planning Processes

Organizations and workers subject to the scope of this LIR must identify site and project requirements and initiate planning processes to address them. The following processes shall be implemented.

7.2.3.1 Comprehensive Site Planning

The Laboratory shall conduct comprehensive site planning to ensure the requirements contained in this LIR (section 7.2.1) are integrated in physical site development.

Comprehensive site planning shall include the development of various plans including but not limited to those listed in Section 7.2.4 of this LIR. Planning shall include short, medium

and long-range horizons and shall be developed with the intent to physically facilitate the missions of the Laboratory.

Physical development at the Laboratory shall be consistent with planning documents and the Laboratory's comprehensive site planning processes.

Institutional principles that shall be considered in any site or physical complex plan are:

- Long-range occupancy and programmatic requirements.
- Facility flexibility to accommodate dynamic scientific missions.
- Improved transportation and utility infrastructure systems.
- Upgrade of facilities by replacing temporary, outmoded, and substandard structures.
- Creation of quality work environments that enhance productivity and scientific collaboration, are safe, environmentally sound, and physically attractive.
- Work environments that are safety and security compliant.

7.2.3.2 Permits and Requirements Identification (PR-ID)

Activities proposed within the scope of the requirements contained in this LIR (see section 4.0 above) must use the Permits and Requirement Identification system (www.esh.lanl.gov/%7Eesh3/prid.html) to ensure Laboratory approvals are obtained before activities begin and best business practices and Laboratory procedures are followed during the activity. PR-ID identifies Hold Points that must be fulfilled for a project or activity to be performed. The PR-ID also identifies "Check Points," recommended reviews driven by LANL and industry best practices and lessons learned.

Guidance Note: Ramifications to projects that fail to obtain required permits and approvals include regulatory compliance orders (up to and including civil or criminal penalties), delays and/or stop work issues, or cancellation of the project, program, or activity.

7.2.3.2.1. Activity Initiation

Prior to initiation of programs, projects, or operations identified in Section 4.0 initial permits and approvals shall be obtained. As soon as the activity can be described, the initial PR-ID shall be prepared.

For projects to proceed into subsequent phases all permits and approvals for the upcoming phase to be started shall be obtained. Issuance and/or approval of the permit or requirement shall be obtained at the required time in the life cycle of program, project operation, or plan.

URL for a current listing of PR-ID hold/check points.
(http://esh-id.lanl.gov/prid/index/prtpermits.asp?home=Y&rpt=Y)

The PR-ID system does not automatically issue the required permits/approvals. Underlying processes shall be engaged when identified by PR-ID based on the defined scope of work.

A clear and complete scope of work for the activity shall be entered into the PR-ID. Procedures for use of the PR-ID are found at (www.esh.lanl.gov/%7Eesh3/documents/PR-ID_OST_draft_revge10-2.doc).

7.2.3.2.2. Activity Life-Cycle

PR-ID records shall be updated by the project manager/leader to incorporate changes in project phases and/or scope of work, evolving project or work detail, or at least yearly for longer-term efforts to ensure required subject mater experts are engaged, changes in requirements are communicated and acknowledged, and hold/check points are addressed.

PR-ID records shall be updated as issues are resolved and at closure of the activity.

7.2.3.2.3. Maintenance of PR-ID System

Permits and Requirements included in the PR-ID shall be updated as legal, regulatory, or contractual changes dictate.

Processes and systems that support the PR-ID and issue the required permits/approvals shall be readily accessible and provide cost effective/timely response to the customer.

7.2.3.3 Site Selection

Site Selection shall consist of a formal review and approval process required for any location, relocation or expansion of new or existing buildings or structures, which include

- Buildings, additions, transportables, trailers, transportainers, sheds, utilities, fences, temporary structures in place for six months or more, roads, and parking areas
- Proposed modification of the natural terrain or ecosystem
- Any activity that otherwise proposes improvements on the land or affect land use

No construction, installation, land impacts, or other on site action as defined above shall proceed without the required site selection approval that must be obtained as defined below. All site selection requests shall include initiation and management of a PR-ID with the PR-ID number noted in the request.

Installation of temporary structures planned to be in place less than six months shall require initiation and management of a PR-ID to ensure required permits and approvals other than site selection are met.

The site selection process shall include two procedures, (1) Siting Notification and (2) Administrative Siting Approval. These procedures may be obtained from the PM-1 Group Office (5-5900).

7.2.3.3.1. Process Requirements

The Institutional Space and Siting Request system requirements contained at (https://remedyw1.lanl.gov/Remedy/Apps/Space/SpaceHome.htm) shall be implemented to initiate site selection. The space and siting system shall be updated when a change in scope has the potential to affect the approved site.

The site selection process shall ensure the evaluation of and confirmation that the planning elements noted in section 7.2.1 above have been considered and issues have been identified for resolution.

Site use shall only be authorized upon the issuance of an approved site permit documenting that the proposed land use will be compatible with adjacent existing and proposed future land uses and is consistent with required physical site plans.

7.2.3.3.2. Additional Requirements for Nuclear Facilities

Nuclear Facilities shall be given additional review in accordance with requirements of DOE O 420.1A and associated guidance ensuring the following areas are considered and effectively mitigated where appropriate.

- Site boundary and land-use characteristics of the site surroundings, including properties at risk from accidental exposures, public exclusion zones (access control), population-center distances, and population density
- Protection of assets based on type and classification consistent with an appropriate level of Vulnerability Analysis based on Design Bases Threat requirements and the Integrated Nuclear Plan
- Proximity of services such as the fire department and emergency medical centers
- Utility systems essential to support safety class Structures, Systems, and Components;
- Physical characteristics of the site, including topography, meteorology, and hydrology
- Geological and subsurface elements such as earthquake loading, soil bearing design capacity, rock or other bearing stratum, and groundwater elevations
- Seismic activity, wind, hurricane, tornado, flood, hail, volcanic ash, lightning, and snow
- Emergency response considerations, including population sheltering or shielding parameters and evacuation delay times and rates for the public and co-located workers
- Potential human-induced hazards from nearby facilities or activities such as industrial and military facilities, aircraft impacts, pipelines, and transportation routes
- Proximity and hazard to other facilities (from the proposed facility)
- Site-related assumptions of the Environmental Impact Statement

7.2.3.3.3. Additional Requirements for High Explosive Facilities

High explosive facility shall be given additional review in accordance with requirement of DOE O 420.1A, the DOE Explosive Safety Manual (M 440.1-1), and associated guidance

ensuring personnel and facility safety. A technical basis for location shall be established to include explosives quantity-distance separation for protection of facility boundaries, critical facilities and inhabited structures from hazardous fragments.

Final approval of sites for nuclear or high explosive facilities shall require detailed hazard analyses documented in either the Preliminary Hazards Analysis or Draft Preliminary Documented Safety Analysis depending upon the project plans (see LIR 300-00-06) and confirmation of required mitigations or site conditions.

To facilitate decisions regarding nuclear and high explosive facilities, the standard process shall be initiated, remain open, and be updated until the hazard analysis and required vulnerability/risk analysis confirms site selection.

7.2.4 Institutional/Organizational Planning

Institutional or long-range planning efforts shall ensure an integrated approach that addresses, using a graded approach, the planning elements noted in Section 7.2.1 of this LIR.

7.2.5 Institutional/Organizational Plans

A variety of plans shall be prepared and maintained to support site and facility decisions by the responsible Laboratory organizations as defined in section 7.1 or as noted below. Specific processes by which plans must be prepared and requirements to be included in these plans shall be established by the responsible organizations. See Section 5.0 of this LIR for definitions of the plans listed below.

7.2.5.1 Site and Land Use

The following plans shall be prepared and focused on institution-wide issues and requirements. Unless otherwise noted, these plans shall be updated at regular intervals within a maximum of every 10 years.

- Comprehensive Site Plan (PM-1)
- Area Development Plans (PM-1)
- Infrastructure Plans (FWO-UI, PM-1)
- Site Safeguards and Security Plan (S-1)
- Integrated Nuclear Plan (ADO-IFC)

7.2.5.2 Facility

The following plans shall be prepared and must focus upon efficient use and management of facilities. Unless otherwise noted, these plans shall be reviewed annually and updated as required.

- Facility Strategic Plans (Line Organizations, PM-1)
- Life Cycle Management Plans
  - Facility maintenance (FWO-MSE)
  - Disposition (FWO-SWO)
  - Long-term stewardship (RRES-RS)

- ES&H Five-Year Management Plan (HSR-DO)

7.2.5.3 Project

The following plans shall be prepared and must focus upon specific projects (construction, maintenance, and/or capital equipment) that fall within the scope of the requirements contained in this LIR (see Section 4.0)

- Ten-year Comprehensive Site Plan (ADO-IFC, PM-1)

8.0 DOCUMENTATION

8.1 Document Ownership

The primary OIC for this document shall be the Site and Project Planning (PM-1) Group.

8.2 Referrals

In preparing or modifying this LIR, coordination and active participation from the following organizations is crucial thus each shall serve as an OIC for their respective disciplines.

- Infrastructure, Facilities, and Construction (ADO-IFC)
- Security Plans and Programs (S-1)
- Environmental Management Organizations (RRES-DO, -ECO, -PP, -RS)
- Health and Safety Programs (HSR-DO)
- Authorization Basis (PS-OAB)
- Facility Operations (FWO-DO, -DECS, -FP, -MSE)

8.3 Documents

This LIR provides requirements that must be implemented to ensure that the Laboratory implements the requirements contained in the following drivers:

10 CFR 830
40 CFR 1500-1508
DOE O 414.1B
DOE O 420.1A
DOE O 430.1A (430.1B Draft)
DOE O 450.1
DOE M 440.1-1
DOE Financial Handbook
Executive Order 13123